19980422.ba v02_n023.bam.980422 v02_n024.bam.980422

>From ???@??? Thu Apr 23 11:43:23 1998
Message-Id: <199804221508.KAA15276@sco.theporch.com>
Date: Wed, 22 Apr 1998 10:07:08 CDT
Subject: BOATANCHORS digest 2023

## BOATANCHORS Digest 2023

Topics covered in this issue include:

1) GN-43 pubs?
   by Edward Zeranski <ejz@nosc.mil>
2) RU Tuning Units in BC-229??
   by David Ragsdale <doragsda@polymail.cpunix.calpoly.edu>
3) inductance available (Miessner, Hammarlund, etc.)
   by John Shriver <jas@shiva.com>
4) Re RU-18 coils in Army set.
   by philip mccoy <dgnova@erols.com>
5) WTB Kenwood SP-230 speaker
   by Chris Lamousin <chrisl@netdoor.com>
6) S-76 BFO knob?
   by Gabor Karsai <gabor@vuse.vanderbilt.edu>
7) power lines / chassis grounds
   by "Larry Johnson" <k5yf@wt.net>
8) Need manuals and info on General Radio 650-A Impedance meter (fwd)
   by "Barry L. Ornitz" <ornitz@tricon.net>
9) Re: power lines / chassis grounds
   by Scott Robinson <spr@earthlink.net>
10) Relic from my past
   by Morris Odell <morriso@vifp.monash.edu.au>
11) Aussie book supplier
   by John Wright <dxer@fl.net.au>
12) Re: power lines / chassis grounds
   by "Arden Allen" <gumbear@pacbell.net>
13) Re: Aussie book supplier
   by Dean Davidson <ddavidso@metz.une.edu.au>
14) Geeez!  Don't kill yerself!
   by "Don L. Davis" <dxguy@earthlink.net>
15) Buried treasure...
   by Ray Mote <rmote@rain.org>
16) Re: "Black Beauty" Caps
   by w7ni@teleport.com (Stan Griffiths)
17) my home page
   by "Steve Hill" <SHILL@onaustralia.com.au>
18) Re: Geeez!  Don't kill yerself!
   by "Arden Allen" <gumbear@pacbell.net>
19) Re: power lines / chassis grounds

by "Roberta J. Barmore" <rbarmore@indy.net>
20) Re: "Black Beauty" Caps
by jackiv@juno.com (John M Iverson)
21) National RCD restoration, part 4
by "Lawrence R. Ware" <lrware@pipeline.com>

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Message-Id: <3.0.1.32.19980421111739.0072a760@marlin.nosc.mil>
Date: Tue, 21 Apr 1998 11:17:39 -0700
To: Old Tube Radios <boatanchors@theporch.com>
From: Edward Zeranski <ejz@nosc.mil>
Subject: GN-43 pubs?
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Does any have a manual, TM11-5122, for the GN-43 generator? Its the set that supports the GRC-109. Thanks!

Ed Zeranski  This is a private opinion or statement.
home email:  ezeran@cris.com

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Date: Tue, 21 Apr 1998 11:24:41 -0700 (PDT)
Message-Id: <199804211824.LAA09226@rubens.artisan.calpoly.edu>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
To: Old Tube Radios <boatanchors@theporch.com>
From: David Ragsdale <doragsda@polymail.cpunix.calpoly.edu>
Subject: RU Tuning Units in BC-229??

Hello All,

Does anyone know if the tuning units for a RU-18 will function in a BC-AS-229 receiver?  I know the details of the circuits in the receivers are different, but I think the TU's will physically fit and am wondering if they'll work.  thanks for any help.

Dave

David Ragsdale
doragsda@polymail.calpoly.edu

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Date: Tue, 21 Apr 1998 15:34:17 -0400
Message-Id: <199804211934.PAA12130@brill.shiva.com>
From: John Shriver <jas@shiva.com>
To: Old Tube Radios <boatanchors@theporch.com>

Subject: inductance available (Miessner, Hammarlund, etc.)

OK, I bought a large box mostly full of RF coils for the telephone parts it contained. Since I don't need the rest, I'll offer them up here. (They must be useful to someone.) Best story on what you need them for will influence who gets things when there are multiple offers (rules of Ware).

(1) Miessner 17-6779 BFO transformer, new in box. It is for a center frequency of 456 kc. This is a large (2" x 2" x 4") black crinkle can, with a trimmer cap out the top with a knob on it. Includes the instruction sheet (which I will make copies of available) for all the speciality "IF" cans in this series. I guess $5, plus postage.

(2) There's a paper envelope labeled: "Tapped down coil for low-gain Hi Q 465 KC Hamm. IF Trans Sec. Removed from Hamm. Super Pro Radio Receiver." It contains a 3-section pie-wound coil wound with Litz wire on a 3/8" ceramic form (1/2" long), with three connections. I also found two coils that looked very much like this, but without the tap. I figure this kit might be worth $5 plus postage to someone who needs it.

(3) Unused Hammarlund choke, 6-section pie-wound, wound on a 3/8" dia. ceramic form that's about 2 1/2" long. The bright green pies are about 1" in diameter, 1/8" thick each. Measured on my GR 1650A (at 1 kc), it's 3.3 mH, with a Q of 1.8. For postage.

(4) Old Hammarlund RF choke in black chassis-mount bakelite case, with two screw terminals at the bottom. It's about the size of a 35mm film can. It is marked 85 mH, but on my 1650A, it measures 120 mH (no DC current?). The Q measures 3. For postage.

(5) A good shoebox worth of RF coils, I suspect intended for use in building IF transformers. All are single-section pie-wound, on a top-hat shaped black form with two terminals on the "brim". All are marked with a logo having an A above a W in a circle. Some are in labeled bags, where all are noted as being wound with 19/40 litz wire. Those bags give these part numbers and values:

| | |
|---|---|
| 400-3 | 50 uH |
| 400-4 | 110 uH |
| 400-5 | 200 uH |
| 400-6 | 500 uH |

Others are labeled 400-32, 400-33, 400-42, more are unlabeled. I didn't measure any. Some have been made into coupled pairs, perhaps experiments at making IF transformers out of them? For postage.

Postage would be from ZIP 02174.

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John Shriver
jas@shiva.com

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Message-Id: <199804211934.PAA22714@smtp3.erols.com>
Date: Tue, 21 Apr 98 14:19:24 -0700
From: philip mccoy <dgnova@erols.com>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re RU-18 coils in Army set.
Content-Transfer-Encoding: 7bit
Content-Type: text/plain; charset=us-ascii

The RU-18 coils do not work or fit the the army set.

However you can modify the Navy coils to fit in the army set. I am going to get flamed by the RU people, but here goes:

(1) Take two RU coil sets of the same frequency range.

(2) Most of the coils have 4 connecting pins. One of the coils has 5 or more pins. Remove this coil on one coil set.

(3) Remove from the second coil set, one of the 4 pin coils and place it in the first coil set where you have removed the 5 pin coil. The first coil set is now your working coil set.

(4) The navy coil set will display some variation in gain as you tune across the band. This is because the bandpass coil (the real small coil) is adjusted to correct for the tunning ratio of the navy set. The army coils cover a larger tuning ratio. The result is still very useable however.

Ok ready to be flamed by the RU people

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Message-ID: <353D2800.C4053A5D@netdoor.com>
Date: Tue, 21 Apr 1998 18:13:05 -0500
From: Chris Lamousin <chrisl@netdoor.com>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
Subject: WTB Kenwood SP-230 speaker
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

I guess the subject says it all. Does anyone have one that they don't need?

Tnx,
Chris
KD5AXK

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Message-ID: <353D59B5.C4989690@vuse.vanderbilt.edu>
Date: Tue, 21 Apr 1998 21:45:09 -0500
From: Gabor Karsai <gabor@vuse.vanderbilt.edu>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
CC: Gabor Karsai <gabor@vuse.vanderbilt.edu>
Subject: S-76 BFO knob?
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Dear List:

I am looking for a BFO knob for a Halli S-76 -- If the original is impossible to obtain,
any advice about "acceptable replacements" will be appreciated.

Much obliged,
-- Gabor

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From: "Larry Johnson" <k5yf@wt.net>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: power lines / chassis grounds
Date: Wed, 22 Apr 1998 03:15:27 -0000
Message-ID: <01bd6d9c$e5b65720$4815ecd0@k5yf>
MIME-Version: 1.0
Content-Type: text/plain;
    charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Ok, I debated long and hard on this set of questions, whether or not to ask them, researched the digest, went through all my old messages, etc. I remember a previous related thread on 3-wire power lines, but couldn't find any references to that thread. So, electing to be stupid and alive rather than dumb and dead, here goes....

Am building a little project, will be using a metal chassis box, and will be using an isolation transformer. There are several connections on the circuit side of the isolation transformer which go to chassis ground. Now the way I see it I have two choices with respect to the power lines and chassis ground.

Alternative 1 is to use a 3-wire cord, safety ground goes to the chassis, and then all of the circuit wiring which goes chassis ground must effectively go to a ground bus, say a set of connected points on a terminal strip which do NOT contact the actual chassis.

Alternative 2 is to use a 2 wire cord connected to the primary side of the isolation transformer. Then the chassis box could indeed be chassis ground on the circuit side of the isolation transformer. Am I missing something here? After all, this is certainly the way a lot of my equipment is, e.g., my big, beautiful Hickock 209A VTVM.

So which would you do?  And what do you do re the old stuff and 3-wire cords?

Larry Johnson, K5YF
Houston, Texas  USA
e-mail: k5yf@wt.net

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Date: Tue, 21 Apr 1998 23:19:54 -0400 (EDT)
From: "Barry L. Ornitz" <ornitz@tricon.net>
To: Old Tube Radios <boatanchors@theporch.com>
cc: ornitz@dpnet.net
Subject: Need manuals and info on General Radio 650-A Impedance meter (fwd)
Message-ID: <Pine.SV4.3.91.980421231008.15796A-100000@kpt1>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Fred Powell asked about the GR-650-A:
>1. Is a six volt lantern battery acceptable for powering it?
>2. How do I adjust the 1 kc buzzer?
>3. What is the proper AC drive level from an HP 200CD?
>4. Anybody have a spare power supply/oscillator/amplifier/detector that
>fits into the battery box?  Or an original wood cover for the battery box?

I do not have a manual either, or even a complete schematic.  I do know the unit is a Hay-Maxwell bridge, however.  These units must have been pretty popular in their day.

I have used both a six volt battery and a twelve volt battery without any problem.  Since the bridge is adjusted for a null, rather than for a fixed voltage, battery voltage should not be critical.

The buzzer is more properly known as a "microphone hummer". A tuning fork like mechanism is acoustically coupled to a carbon microphone element. Feedback from the microphone is used to drive the coils causing the tuning fork to oscillate. Check the carbon microphone element before doing anything rash to the hummer adjustments. My unit oscillates at 1020 Hz which is close enough for me.

Again the drive level of an external oscillator is not critical - a few volts should be fine.

I am not aware of any amplifier/detector for the unit, but an AC power supply was available. You should use high impedance headphones to null the unit. Having only low impedance units, I used a 5 Kohm to 8 ohm output transformer to match my low impedance phones. This worked fine. Using a VTVM or my scope to detect the null produced only marginal results. Using a differential input to the scope would have helped. The nice thing about headphones, however, is the fact that near the null, harmonics of the oscillator can be heard. These typically null at slightly different dial settings than does the fundamental. The result is that you can quickly null the bridge using the headphones with amazing accuracy. Human hearing is also logarithmic making null detection easier too.

On a side note to the Boatanchor group, I am now back online again with a local ISP. I am very pleased with my new employer, W. L. Gore & Associates, and I think I will like the Elkton, MD area too. I am currently living in an apartment, but my wife and I close on a new house on May 1. While I have been here in MD/DE/PA, my dear wife has been packing all the Boatanchors and stuff back in Tennessee. I pray she packs everything well, but I know it will take years before I can ever find things again! The new house was bought with our 24 dogs, 15 cats, and tons of Boatanchors in mind - a full walk-in basement and an attached two car garage. The yard is slightly over an acre too with all underground utilities, and a 200 foot ground rod that also happens to serve as the well.

I expect the actual move from Tennessee will be toward the middle or the end of next month. So if I am late in any replies, or if I disappear for a week or so, I certainly do plan to be back. I have to arrange for the yard to be fenced, and probably put in a water conditioning system for iron and pH. I expect my wife will keep me busy for many months doing all the small things needed to make a house a home - a.k.a. Honeydew jobs!

I have not kept up with the list too closely for the past month [it is expensive to dial long distance to my old ISP]. I did want to say that I missed all of you fine people and the lively discussions. With the move an all, I will miss Dayton too. But there is always next year, and I can at least lust over the prizes everyone else were able to snag in the flea market.

For those needing to send me mail, my new addresses are:

ornitz@dpnet.net at home, and:

ornitz@wlgore.com at work.

It is good to be back in here again. I wish everyone a safe trip to and from Dayton, and I hope you all find some unexpected bargains in the flea market. Wish me luck with Lana packing all the electronic equipment, and let's hope the moving van is not weighed down too much.

73, Barry L. Ornitz WA4VZQ ornitz@dpnet.net

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Message-ID: <353D6A25.DB8599@earthlink.net>
Date: Tue, 21 Apr 1998 20:55:17 -0700
From: Scott Robinson <spr@earthlink.net>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: power lines / chassis grounds
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Folks:

I'll tell you what I, as a practicing analog audio engineer do about 3 wire line cords (or mains leads for you UK folks). In a given set-up , I interpose a ground lifter (3 wire adaptor with the pigtail or lug not connected) in the power cords of all but one piece of equipment. Usually I choose the scope to be grounded, because Tek scopes at least have serious RFI filters on them that pull several mils of ground current. The set up will be quietest if that current does not flow between pieces of equipment.

If the internals of the equipment are or can be isolated from chassis, some of this is unnecessary. If you are measuring microvolts at audio frequencies, these are the things you must think about.

Doing this has never gotten me zapped.

Regards,

Scott Robinson
spr@earthlink.net

Junque is GOOD for you!

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Message-ID: <353D6FE8.5E55@vifp.monash.edu.au>
Date: Wed, 22 Apr 1998 15:19:52 +1100
From: Morris Odell <morriso@vifp.monash.edu.au>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Relic from my past
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hi all,

I was fossicking around a local junque emporium yesterday looking for a certain sand state item when I found a variable high voltage supply. Nothing particularly odd about that, but this one brought back a flood of memories. This supply was one of the very ones I used to use when I was an engineering student about 30 years ago - it had obviously been hoarded by the University since then and finally thrown out. It's now back in the hands of one of it's former users.

In the late 60s we were not taught anything about vacuum tubes (except how crappy they were) but the electronics lab still had a lot of stuff from the tube era. These variable power supplies were obviously used a lot by students before my time and were made especially to be "student proof". By the time I got to the lab the only use I can remember for them was to provide stiff tails for long tailed transistor pairs.

The supply is a real boatanchor with 6 tubes and lots of grimy heavy iron. The choice of tubes reflects the US/European schizophrenia of our electronics industry in the postwar years. Unfortunately the rectifier is a GZ32 which has been priced into the stratosphere by the audiophooles but the one that is in it seems OK. The regulator is a 6DQ6A controlled by a 6AU6 and two european labelled reference tubes. There are 2 output voltage ranges, 80-180 and 180-310 at 100 mA continuously variable, fully floating and ideal for vacuum tube experimentation. I checked and reformed the electrolytics in it using a Heath IT-11 capacitor checker (ideal for this purpose). It worked perfectly as soon as it was fired up and delivered its rated current into a load as advertised.

Apart from the dirt of 30+ years, the major cosmetic problem is the meter. There's a large plastic cased voltmeter on the front which has turned yellow and opalescent to the stage where you can hardly see the

pointer move. The cover is removeable and still quite solid. Any ideas
on plastic restoration or is this an impossible task?

73 de Morris VK3DOC

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Message-ID: <353C51BB.55CF@fl.net.au>
Date: Tue, 21 Apr 1998 18:58:51 +1100
From: John Wright <dxer@fl.net.au>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Aussie book supplier
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hi John Wright here, for all you BA's collectors in Australia.
The Australian Radio DX Club is importing The "Shortwave Receivers Past and Present Edition 3", by Fred Ostermann,. We will take orders at the same price for BA collectors at AUD 45-00 to your door, either email me or ring me on (02)9533 6261 AH. A terrific book, thanks FRED.

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Message-Id: <199804220459.VAA28817@mail-gw6.pacbell.net>
From: "Arden Allen" <gumbear@pacbell.net>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: power lines / chassis grounds
Date: Tue, 21 Apr 1998 22:00:10 -0700
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit

Larry Johnson wants to know how to make a radio project safe:

> Now the way I see it I have two choices with respect to the
> power lines and chassis ground........

There are two questions I try to answer when faced with similar choices:
1.  What is the capability of components to withstand normal application of power line voltage (which includes transients) for an indefinite period of time with nil chance of failure?  2.  What possible and probable fault conditions can occur which will render my equipment hazardous?

Components can fail.  Grounds can open.  Either can occur with reasonably high probability with old equipment and with the crummy electrical cordage and outlets we buy which are "safety approved" (what a joke).

Which ever way you decide to build your project, you have to design and then build sufficient safety margin into it, selecting quality components of proper rating and using sound construction techniques. Then comes safety maintenance of your electrical environment, i. e., testing for replacement of faulty outlets, intermittent power cord connectors, etc. And lastly, usage of the equipment in a manor that does not compromise the integrety of safety component reliability and functionality.

This may sound like a helping of professorial claptrap to some but it is really an attempt to get folks to think about what safety is. Safety is not a recipe out of a cook book. Safety is a habit one develops when one is mindful of being constantly exposed to danger. It's like good seamanship! Now go "blow the man down".

Arden Allen KB6NAX Vallejo, CA gumbear@pacbell.net

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Message-Id: <3.0.5.32.19980422150213.0082d7d0@metz.une.edu.au>
Date: Wed, 22 Apr 1998 15:02:13 +1000
To: Old Tube Radios <boatanchors@theporch.com>
From: Dean Davidson <ddavidso@metz.une.edu.au>
Subject: Re: Aussie book supplier
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

At 18:58 21/04/98 +1100, John Wright wrote:
>Hi John Wright here, for all you BA's collectors in Australia.
>The Australian Radio DX Club is importing The "Shortwave Receivers Past
>and Present Edition 3", by Fred Ostermann,. We will take orders at the
>same price for BA collectors at AUD 45-00 to your door, either email me
>or ring me on (02)9533 6261 AH. A terrific book, thanks FRED.
>

Whilst speaking of books and their sales in Australia.

I now have plenty of copies of Stan Griffiths book "Oscilloscopes - Selecting and Restoring a Classic" for those in Australia who would like this bible on older Tektronix Oscilloscopes.

$22.50 mailed to you anywhere in Australia.

Dean
Dean Davidson ddavidso@metz.une.edu.au

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Message-ID: <353D9087.31E4@earthlink.net>
Date: Tue, 21 Apr 1998 22:39:27 -0800
From: "Don L. Davis" <dxguy@earthlink.net>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>

Subject: Geeez!  Don't kill yerself!
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

I was shocked (no pun intended, much) to read Larry's querry re: ground wires and Scott's shockingly dangerous reply.

ALWAYS ALWAYS ALWAYS (excuse me for shouting) use a 3 wire ground plug on each and every piece of equipment you own.  I don't know what  audio engineering is (or is not) but I'm a real-life MSEE (Master's in Electrical Engineering with emphasis in power conversion from a major university), and do "power" for a living (for the past 30 years anyhow - so, I'm a relative newcomer).  I've fired a lab tech for doing what Scott suggests.  There is never a good excuse to defeat the 3 wire ground.  If you have hum or noise or problems or difficulty measuring microvolts of signal, then you need better, differential, safe equipment.  Also, lab or shack equipment should not (as a rule) be connected through other pieces of equipment.  Get a good, approved, breaker strip to extend the number of outlets & check all outlets periodically with the proper tester.  Also, GFCI is good insurance.  It will also convince you that you really DO need to change those leaky caps in the old BA (due to GFCI trips).

Re: Larry's project:  The primary should be fused in the high side, 3 wire cord with ground connected to chassis.  On the secondary (as long as there truly is isolation between PRI & Secondary, choice of chassis or local grounding is dictated by use and requirements.  The ARRL literature covers all of this quite well.  At least since the 60s or 70s.

Re: Giving advice to others on the Internet:  I wonder how one would feel if a friend or acquaintence (or even a stranger) took one's advice & wound up killing himself due to an unsafe set-up?  I wonder if the family could come back & sue the person giving such advice?  Also ponder: a supervisor in my field (in CA anyhow) who knowingly allows a subordinate to work on an unsafe set-up is guilty of a crime if the person is injured or killed.  Just wondering.

73s in saftey,   Don Davis   DXGUY@earthlink.net

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Date: Wed, 22 Apr 1998 01:06:28 -0700 (PDT)
From: Ray Mote <rmote@rain.org>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Buried treasure...
Message-ID: <Pine.SUN.3.96.980422004707.12095A-100000@coyote.rain.org>
MIME-Version: 1.0

Content-Type: TEXT/PLAIN; charset=US-ASCII

Hmmm... going through the attic, closets, garage, etc. to pack up stuff for the move can have its benefits:

A gorgeous UTC audio transformer rated at 40 watts, primary & secondary taps all the way up to 500 ohms.  A UTC CG-16 (I'll have to wait till I can access my specs in Florida) but it has plate & B+ primary and a bunch of secondary taps.  Various Thordarson audio output transformers anywhere from 5 to 10 watts, Thordarson driver transformer, etc.  Those Millen slide-rule dial drives.  A 5-20 Hy swinging choke rated for 300 mA.  A NOSB "Cannon-Ball" dual 'phones set.  That NOSB Vibroplex Presentation I got 20 years ago and never used (the Champion carried the workload nicely).  That power transformer that's just right for the 1959 ARRL Handbook Novice tx (single 6146 xtal osc) that I had as a Novice in 1960.  The B&W Miniductor for that same rig.  And the list goes on...   I had completely forgotten about a good bit of this stuff -- one of the disadvantages of a helter-skelter approach to acquiring BA gear and parts while working.  It just goes into the first available nook/cranny, there to gather dust until rediscovered.  At least *I* found it, rather than some "estate archeologist".

Man, oh Man, am I ever gonna have some fun when we get to Florida!
(That is, *if* I survive and can still lift anything.  :-)

Ray Mote, K5FKT  <rmote@rain.org>  Oxnard, CA

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Date: Wed, 22 Apr 1998 03:00:38 -0700 (PDT)
Message-Id: <199804221000.DAA12722@mail1.teleport.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
To: Old Tube Radios <boatanchors@theporch.com>
From: w7ni@teleport.com (Stan Griffiths)
Subject: Re: "Black Beauty" Caps
Cc: boatanchors@theporch.com

>What are the identifying characteristics of these caps? Everything I've read
>seems to indicate an almost 100% failure rate by now. Apparently the radios
>I've had over the last 40 years didn't have any of these since I've had to
>replace very few caps in that time.

>73, Ray  W2EC

The black beauty caps that cause a lot of trouble in Tek scopes are axial lead black caps with several colored bands on them.  For example, .01uf at 400 volts will have a brown band, black band, orange band, and a yellow band.

brown = 1
black = 0
orange = three zeros

(This is the value in picofarads [or mmfd, if you prefer])

Yellow = 4  (400 volts)

Even though the body is black and so is one of the bands, you can still tell
it is there because the body tends to be shiny and the band is dull.

Stan  w7ni@teleport.com

------------------------------
From: "Steve Hill" <SHILL@onaustralia.com.au>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: my home page
Date: Wed, 22 Apr 1998 19:50:54 +1000
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit
Message-Id: <09553977015433@onaustralia.com.au>

Guys,

I have just added several more radios to my home page.
Check it out at <http://www.users.bigpond.com/SHILL>

73s
-----------------------------------------------------
Steve Hill              VK4CZT
<SHILL@onaustralia.com.au>
check out my military radio page at:
<http://www.users.bigpond.com/SHILL>
39 Banbury St.
Carina. 4152.
Brisbane. Australia.

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Message-Id: <199804221109.EAA16767@mail-gw5.pacbell.net>
From: "Arden Allen" <gumbear@pacbell.net>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Geeez!  Don't kill yerself!
Date: Wed, 22 Apr 1998 04:10:55 -0700
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit

Don Davis ponders;

> Re: Giving advice to others on the Internet: I wonder how one would feel if a friend or acquaintence (or even a stranger) took one's advice & wound up killing himself due to an unsafe set-up? I wonder if the family could come back & sue the person giving such advice? Also ponder: a supervisor in my field (in CA anyhow) who knowingly allows a subordinate to work on an unsafe set-up is guilty of a crime if the person is injured or killed. Just wondering.

I will speculate on this: If the person *willfully* and *knowingly* gave advice to a person with the intended result being to increase the exposure of a person to danger than he might be determined to be guilty of some crime by a jury. But the setting is important also. On the Internet it is a matter of non-responsible speech and the "guilty" person couldn't be held responsible for someone else's safety. A supervisor at work would be on his way to jail, I'm afraid, only *after* someone got injured or killed. The bottom line (no pun intended) is you are the only one who is responsible for the safety of your butt.

Arden Allen KB6NAX Vallejo, CA gumbear@pacbell.net

------------------------------

Date: Wed, 22 Apr 1998 08:42:41 -0500 (EST)
From: "Roberta J. Barmore" <rbarmore@indy.net>
To: Old Tube Radios <boatanchors@theporch.com>
cc: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: power lines / chassis grounds
Message-ID: <Pine.SUN.3.96.980422074840.4918C-100000@indy2>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Hi, Scott et al!

I'm going to address mostly Scott's method here, having already sent a private e-mail to the original questioner that *may* make sense of what isolation xfrs do for a living and why Floating Can Be Bad.

On Tue, 21 Apr 1998, Scott Robinson wrote (and was beat up over):

> I'll tell you what I, as a practicing analog audio engineer do about 3 wire line cords[...]. [...] I interpose a ground lifter (3 wire adaptor with the pigtail or lug not connected) in the power cords of all but one piece of equipment.

Having to do this is a sure sign your lab power was wired up by FlyByNite Eletric, or maybe The Huge Kludge Co; but don't be sad, it is only too common.

*If* the ground wiring in an electrical system is okay, you can normally get away with using the power-cord grounds as the *only* ground connection between the gear--in fact, most of my 'scope probes at work don't have a ground clip on 'em (they're stowed away safely and we didn't cut 'em). If I get a lot of noise, I fake up a differential input (easy on most Tek two-channel 'scopes: invert one channel and select ADD; since I have a nifty old mainframe, I just add another two-channel input module and do the same to it if I still need dual-trace). But that's rare. (This is big signals, a half-volt or more is typical, in a middlin'-noisy environment).

However, to pull this off, you have to have A) a really good and well-done ground system and B) DECENT POWER CORDS! The nasty little power strips are the worst; the connections usually have to be soldered (folks, they're just crimped at the factory, if we can call it crimping--mildly smooshed is more like) and it's not uncommon to have to replace the plugs every so often, too. (And buy the power strips with *good* sockets while you're at it).

It's our old pal Ohm's Law again; you get the resistance down to zilch, and you don't see voltage differences between the "ground" of Device A and the "ground" of Device B (and from this perspective, it does not matter if "ground" is connected to earth or not--though for safety & Code reasons, it'd better be).

Now Scott will be chasing me with a microvoltmeter and not without reason--he's looking at fly-footstep voltages in an environment that's probably just reeking with electrical noise and there *are* times when it takes wicked tricks to find a firefly in the glare of a searchlight. Even the finest of differential inputs will not have sufficient common-mode rejection (or other flaws) under some circumstances. (There are ways around it. For one, you can slap a honkin' big isolation xfr in the line at your lab and essentially start over from scratch with the common ground buss--an excercise in both applied physics and the more obscure parts of the NEC & local codes; also in hunting down shared-neutral bollixes).

But for most of us, simply playing by the book and paying attention to what results will do the trick. I am no saint, I have a nasty habit at home of using two-prong polarized plugs and my very own ground leads; but that does satisfy the intent of the rules. (Once--if ever!--I get the AC rewiring in the shack/shop done, some of that will go away. There's a shortage of three-pin sockets and Actual Code Ground at present).

In very general terms, you ground the chassis or case of *anything* electrical. Always. Somebody hands you an old AC/DC set with none of the usual tricks to keep the hot side hot and the cold side cold, you use an isolation transformer. You do *not* float grounds in a hobbyist setup, period. It's just too darned unpleasent for your spouse to find you half-cooked; co-workers don't care as much and can cope with it better.

Scott adds:

> Doing this has never gotten me zapped.

...But please remember, his toys say things like "Tektronix" and "Hewlett-Packard" on them and were not bought at a hamfest condition unknown; he's dealing with tiny stuff under demanding circumstances and he is *not* using an AC/DC Eico sig gen to do it. (Scott, I still think you need to go rough up some folks in Electrical; there just should not be that much ground-to-ground noise!)

73,
--Bobbi

(Confession time: have I ever lifted ground professionally? I have--those Weller solder stations have the tip earthed and when you need to solder wires onto an audio connection that's in use, you'd better not be grounding it every time you lay the iron on the terminal; so I use a ground lift...and take it off the *second* I am done. It's a riskier trick than first sight suggests, as a possible but improbable failure mode could put the tip at some voltage between it and AC neutral; which goes to ground and would therefore show up in the live audio running through the point where the iron is applied. The smart money looks for any AC between tip and ground before soldering with the ground lifted!)

------------------------------
To: Old Tube Radios <boatanchors@theporch.com>
Cc: boatanchors@theporch.com
Date: Wed, 22 Apr 1998 09:41:34 CDT
Subject: Re: "Black Beauty" Caps
Message-ID: <19980422.094529.3470.1.jackiv@juno.com>
From: jackiv@juno.com (John M Iverson)

Another characteristic is that caps marked in yellow with the data in mfd and the rated voltage have been found to have the same problem as the striped ones, however if the markings are in red the failure rate is very low, they will pass the cap tester at higher than rated voltage fwiw
73 jack
Jack Iverson K0EWU jackiv@juno.com

On Wed, 22 Apr 1998 03:00:38 -0700 (PDT) w7ni@teleport.com (Stan Griffiths) writes:
>>What are the identifying characteristics of these caps? Everything
>I've read
>>seems to indicate an almost 100% failure rate by now. Apparently the
>radios
>>I've had over the last 40 years didn't have any of these since I've
>had to
>>replace very few caps in that time.
>
>>73, Ray W2EC

>
>The black beauty caps that cause a lot of trouble in Tek scopes are
>axial
>lead black caps with several colored bands on them.  For example,
>.01uf at
>400 volts will have a brown band, black band, orange band, and a
>yellow band.
>
>brown = 1
>black = 0
>orange = three zeros
>
>(This is the value in picofarads [or mmfd, if you prefer])
>
>Yellow = 4  (400 volts)
>
>Even though the body is black and so is one of the bands, you can
>still tell
>it is there because the body tends to be shiny and the band is dull.
>
>Stan  w7ni@teleport.com
>
>

______________________________________________________________________
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Get completely free e-mail from Juno at http://www.juno.com
Or call Juno at (800) 654-JUNO [654-5866]

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Message-Id: <3.0.5.32.19980422102115.00816100@pop.pipeline.com>
Date: Wed, 22 Apr 1998 10:21:15 +0000
To: Old Tube Radios <boatanchors@theporch.com>
From: "Lawrence R. Ware" <lrware@pipeline.com>
Subject: National RCD restoration, part 4
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Good morning folks!

>From our last episode:
(Now we have a good power supply, we have a good audio output amp
and system, and were ready to move on....)
<snip>

In todays installment of our ongoing serial epic: :-)

Front panel refinishing and what not to do afterward.....

-and-
Crystal filter refurbishing 101.

The front (rack mount) panel of this radio when it came in here was in terrible shape. Most of the paint was gone, what remained was cracked, peeling and looked pretty sad.
After the panel was removed it was put aside for a sunny day with some time.

When that day arrived, bright and hot with little wind, out to the end of the driveway it went and out came the paint stripper,
HD rubber gloves, scrub brushes and hose...
The first layer of dirt and grime was washed off with soap and water, followed by 15 minutes to dry and warm up in the Florida sun.
Pull on the heavy rubber gloves (These are important! Dr. Barry Ornitz has expounded on the dangers of Methylene Chloride on the BA list from time to time before. It is very nasty stuff and has to be used with extreme care. Methylene Chloride is the primary ingredient in industrial strength paint stripper compounds.) Apply paint stripper as directed, wait five minutes, and off the remaining paint comes....
Clean up with *LOTS* of running water and let dry in the sun.
A scotch brite pad and elbow grease produces a nice bare polished aluminum surface to work with.

A pre paint wash with a paint prepping cleaner/solvent to remove any remaining surface contamination and we're ready to paint.
I used Black Winkle paint purchased at the local Harley-Davidson store, followed the directions about multiple coats for best effect and left it to cure in the sun for a few hours. Then back inside for a day or two to finish curing...
Result: looks great! Very nice almost Satin Black Wrinkle finish.

The engraved panel markings were then filled in with plain old Testors(sp?) hobby white enamel like they use on all kinds of models.
Left to dry over night again, the panel was reinstalled on to the front of the chassis, followed by mounting of many of the replacement control pots, the PW dial, etc.

Next I turned to my poor sad looking crystal filter assembly.
when removed from the radio, the wires were falling apart, the caps were almost un turnable, and the thing was dirty as heck.
These are not that hard to get out of an old National, but they *are* a real pain to work on! The only trick is to know that it has several smaller shields inside, and that the lower one is also mounted to the chassis. So be sure to remove the two nuts from the studs inside the perimeter mounting studs as well as the ones on the edges of the filter assembly.

Hank Van Cleef has from time to time discussed the techniques of manufacturing radios on BA: His comments served me well with this. There is a right way, and lots of wrong ways to take one of these apart. (Bet I know most of the wrong ways by now!) Once you get it out you can see why it is a thing best left alone if possible. Because of rotting wire insulation, I did not have that option. The best advice I can give you: Don't go here if you can help it.

Once you get the (screwed on) side panels off one of these things, you realize what a project you have in front of you. Not much room to work, and the internal wiring has no slack in it at all. A true 3D puzzle.

Before rework got too far along, a scotch brite pad was used to polish the outside of this thing while it was out. Looks pretty good.

Hours later mine had new wiring, had the crap cleaned out of the variable capacitors and was ready for reinstallation in the radio chassis. I reattached the side with the crystal holder first because it fits in next to the main tuning cap. and you will never get the screws in if you don't do it first. Left the other side off so I could use my fingers to guide the lower internal shield back into its mounting holes. Started to line everything up and discovered my major screw up from the day before..... It don't/won't fit in if the front panel is installed.... Does not clear the front panel holes for the controls... :-( <big sigh>

Todays big lesson: Reinstall both the crystal filter and the BFO can *BEFORE* you put the front panel back on.....

Removed the front panel again, and reinstalled the crystal filter module.
Tomorrow the BFO module gets the treatment.
I will also reinstall the BFO before we put the front panel back....

Till next time, help keep em glowing....

-Larry

# Larry Ware
# Admirer, Collector, Restorer of National Radio Company
# receivers and other artifacts.
# Orlando, Florida
# lrware@pipeline.com

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End of BOATANCHORS Digest 2023
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>From ???@??? Thu Apr 23 11:44:22 1998
Message-Id: <199804230142.UAA04208@sco.theporch.com>
Date: Wed, 22 Apr 1998 20:41:23 CDT
Subject: BOATANCHORS digest 2024

BOATANCHORS Digest 2024

Topics covered in this issue include:

1) LOCATING POWER LINE QRN
by JOHN_SEHRING.parti@ecunet.org (JOHN SEHRING)
2) Re: Geeez!  Don't kill yerself!
by Richard Loken <richardlo@devax.admin.athabascau.ca>
3) Re: power lines / chassis grounds
by Bill Hawkins <bill@iaxs.net>
4) Re: power lines / chassis grounds
by Bill Jarvis <B.H.Jarvis@hw.ac.uk>
5) ADMINISTRIVIA: Over Quoting
by listown@jackatak.theporch.com (Mail List Owner)
6) subminiature protection
by laffitte@prtc.net (laffitte)
7) Re: Geeez!  Don't kill yerself! (Bzzzzzt!)
by Jack Harper <jharper@bs2000.com>
8) Weller soldering devices
by k5pgw@linknet.net
9) Navigator - who had one for sale at $80?
by Stevenn@ix.netcom.com
10) Re: Weller soldering devices
by John Shriver <jas@shiva.com>
11) Re: Yellowed plastic  Relic from my past
by "Captain Larry Rau" <rau@wco.com>
12) Grounded outlets.
by "Paul Bernhard Sr." <w2tu@email.msn.com>
13) restoration issues?
by "Lawrence R. Ware" <lrware@pipeline.com>
14) Re: restoration issues?
by Lenox Carruth <carruth@swbell.net>
15) Re: restoration issues?
by "A. B. Bonds" <ab@vuse.vanderbilt.edu>
16) GR 650A bridge
by Doug Ripka <dlr11@scasd.k12.pa.us>
17) FS: National HRO coil sets
by JONWEINER <JONWEINER@aol.com>
18) Re: power lines / chassis grounds

    by Jerry Proc <jproc@idirect.com>
19) Re: power lines / chassis grounds
    by Bob Roehrig <broehrig@admin.aurora.edu>
20) Need RAL-7  HELP
    by "Don Ehrlich" <ehrlich@olypen.com>
21) Re: Geeez!  Don't kill yerself! (Bzzzzzt!)
    by Charles Ring <charlesr@infonline.net>
22) Re: Need manuals and info on General Radio 650-A Impedance meter
    by "N. West" <ninaw@u.washington.edu>
23) Puget Sound Antique Radio Association Information
    by "N. West" <ninaw@u.washington.edu>
24) HRO-50 Tuning strips FS/trade
    by gcr2@po.CWRU.Edu (George C. Rybicki)
25) 1925 magnetron
    by Bill Jarvis <B.H.Jarvis@hw.ac.uk>
26) HX50 Tranformer Woes - How to Rewind?
    by Jim Garland W8ZR <4CX250B@miavx1.acs.muohio.edu>

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MIME-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit
Date: Wed, 22 Apr 1998 11:12:41 -0400 (EDT)
Subject: LOCATING POWER LINE QRN
To: Old Tube Radios <boatanchors@theporch.com>
From: JOHN_SEHRING.parti@ecunet.org (JOHN SEHRING)
Message-ID:  <9804221112.aa19237@pcusa01.ecunet.org>

To: boatanchors@theporch.com

The consensus of notes I've received is that power line QRN hunting is best done with *both* MF/HF and VHF receivers.

As noise propagated on the power lines at low freqs has the form of standing waves, you may just drive past the HF or MF peaks & nulls for many miles.

MF/HF lets you know it's there, someplace.  VHF gets around the standing waves on the lines & lets you zero in much more closely to the actual (not propagated) source.  MF/HF receiver can then confirm it.  Yes, ferrite core MF antenna is good 'cause it has a nice null.  I don't use a directional antenna on VHF (I use about 150 MHz) 'cause I don't have one.

I've noticed that severe HF sources also mess up TV & FM broadcast reception too.  The actual shape of the noise spectrum depends on exactly what kind of waveform the noise is making.  Fourier series & all that tells you which frequencies are affected & by how much.

Also, the higher & weaker harmonics may down in the noise level until you get close enuf to the noise source. And yes, it is useful to be able to hear the noise on an AM rx--our ears can tell us a lot, a built-in, base-band sprectrum analyzer.

-John Sehring (written on Tue, Apr 21, 1998 at Custer, SD) UCC WB2EQG

------------------------------

```
Date: Wed, 22 Apr 1998 09:43:47 -0600 (MDT)
From: Richard Loken <richardlo@devax.admin.athabascau.ca>
Subject: Re: Geeez!  Don't kill yerself!
To: Old Tube Radios <boatanchors@theporch.com>
Cc: Old Tube Radios <boatanchors@theporch.com>,
        ~richardlo@devax.admin.athabascau.ca
Message-id:
 <Pine.PMDF.3.95.980422092531.541065905A-100000@devax.admin.athabascau.ca>
MIME-version: 1.0
Content-type: TEXT/PLAIN; charset=US-ASCII
```

On Tue, 21 Apr 1998, Don L. Davis wrote:

> I was shocked (no pun intended, much) to read Larry's querry re: ground
> wires and Scott's shockingly dangerous reply.

> ALWAYS ALWAYS ALWAYS (excuse me for shouting) use a 3 wire ground plug
> on each and every piece of equipment you own. I don't know what audio
> engineering is (or is not) but I'm a real-life MSEE (Master's in
> Electrical Engineering with emphasis in power conversion from a major
> university), and do "power" for a living (for the past 30 years anyhow -
> so, I'm a relative newcomer). I've fired a lab tech for doing what
> Scott suggests. There is never a good excuse to defeat the 3 wire

When I was working at CHAB Radio in 1978 we recieved a new audio power amp (19" rack mount) for some long forgotten purpose. The instruction manual said something like this: "We put on a three wire cord because we are required to by law, we suggest you remove it." This was made in USA by a real live company not some garage outfit out of Taipai. I do not recall having to remove the ground to control hum problems but with audio that is always a possibility.

At CKY TV where I worked before that I went around testing the several hundred a/c outlets including those in our forest of 19" racks and some 25% of them were wired wrong including cases where the ground was not wired at all.

Second case study: My present house was built in 1950 with two wire Lumex - nary a ground to be found - and some $#%@ licensed electrician who I will leave unnamed to avoid libel action went around and replaced all the two wire outlets with three wire outlets so I now have a house full of harmless looking three wire outlets with no grounds. Well not completely, but any three wire circuits in the house were put in by me with all the appropriate permits and inspections.

You may implicitly trust as three wire cord to save your life but I won't.

---

Richard Loken VE6BSV, Systems Programmer - VMS
Athabasca University
Athabasca, Alberta Canada
** richardlo@admin.athabascau.ca **

------------------------------

Date: Wed, 22 Apr 1998 10:53:33 -0500 (CDT)
From: Bill Hawkins <bill@iaxs.net>
Message-Id: <199804221553.KAA12194@citrus.iaxs.net>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: power lines / chassis grounds

One persons ground is for safety, another's for shielding.

We few who are electronic archaeologists work with equipment that comes from a time when power grounding was not the way you got electrical safety. The way we used then was to avoid becoming part of the circuit. Keep one hand in the pocket when touching, or liable to touch, live electrical stuff. The lesson is best learned by experience - and surviving it. Seems to me that opportunity to learn is more dangerous now, because the only source of high voltage is the power line. The rest are 3 to 5 VDC, occasionally 24 VDC. Can't learn from that.

I still can't pick up a double insulated appliance and get any where near a water faucet, even a plastic one. Yet I've never been bit that way. A few B+ and a spark coil was all it took.

Of course, now that three wire cords and outlets are available, you ought to use them. But don't _trust_ them.

Bill Hawkins

------------------------------

Message-Id: <199804221454.PAA23530@punt2.hw.ac.uk>
To: Old Tube Radios <boatanchors@theporch.com>
From: Bill Jarvis <B.H.Jarvis@hw.ac.uk>
CC: boatanchors <boatanchors@theporch.com>
Date: Wed, 22 Apr 1998 16:54:09 +2200
Subject: Re: power lines / chassis grounds

Thanks for the useful discussion of microvolts, common impedances etc; I won't quote it all back.

It reminded me - brother-in-law has just had house rewired with earth leakage contact breakers, dimmer switches, and 24 V ceiling lights which run off transformers.

You've guessed. Turning on a small number of lights flips the ELCBs.

The man who supplied the dimmer switches says it's the transformers. The man who supplied the transformers says its the dimmer switches.

<I> suspect it's leakage currents through the hash suppression capacitors which I assume go from neutral to earth inside each dimmer switch "module" - out of reach of the electrician's discretion.

Is this a common problem? I would have thought it would be SO common by now that there is a standard cure; but brother-in-law is getting no satisfaction; and I suspect that if I so much as attempt to measure leakage impedance, I'll qualify in law as the Last Person To Touch The Installation - which by definition is the Guilty Party.

Well, in the UK, anyway.

Yes, sorry, not BA - but the theory behind the problem is relevant.

Thanks in anticimapation,

```
============   =====   =====   BILL  J.   =====   =====   ============
GM8APX, qthr                                  EDINBURGH, SCOTLAND, UK
```

Aiunt multum legendum esse, non multa

Net-Tamer V 1.10  - Registered

```
------------------------------
Message-Id: <199804221615.LAA04485@jackatak.theporch.com>
From: listown@jackatak.theporch.com (Mail List Owner)
To: Old Tube Radios <boatanchors@theporch.com>
Subject: ADMINISTRIVIA: Over Quoting
Date: Wed, 22 Apr 98 11:15:01 CDT
```

Gang-

Please accept this periodic posting as a gentle nudge and suggestion intended to improve the quality of posts to the BoatAnchors list, and as an effort to maintain our excellent (and high) signal to noise ratio...

The list culture is to include only those portions of a prior post that are required to maintain the context of your comments. We have always tried to reduce the amount of "chaf" on the list, and this is one way.

In private mail between you, a subscriber, and me,, as list manager, I really don't care one way or the other, but when posting to the list, there are at least two issues of concern:

one, the increased bandwidth from including extra text.
With the trial subscriptions and full members, the number of copies of each post mailed out change the impact of each extra word so that each single character becomes 1,000 characters of mail!

second, when not editing out included text, it sends a not too subtle message to the list, that the poster considers his/her own time to be more valuable than the collective time and energy of the 600-700 readers on the list... not exactly a "positive" message! ;^)

This isn't rocket science... you place the pointer at the top of the message you are including *parts* of, and click-drag to where you need to include, and then hit the backspace or delete key... painless, easy, quick, and very helpful to the list.

Treat the list as a symposium. In such an environment, with 600 others attending who have paid to be there, it is unlikely you would repeat someone else's portion of a conversation in its entirety as part of your own remarks... it would become very tedious, very quickly, if you did... especially if you repeated even the closing signature block of the previous message.

Thanks for your understanding and help in making the boatanchors list have the highest signal to noise on the InterNet.
--
73
Jack, W4KH/Mobile - - - BoatAnchor Mailing List Owner - - -
 listown@jackatak.theporch.com - "Plus ca change, plus c'est la meme chose"
     "Il n'y a que les idiots qui ne changent jamais d'idee"

------------------------------
Message-ID: <353E0CCE.70CD@prtc.net>
Date: Wed, 22 Apr 1998 12:29:18 -0300
From: laffitte@prtc.net (laffitte)
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
Subject: subminiature protection
Content-Type: text/plain; charset=us-ascii

Content-Transfer-Encoding: 7bit

Hello Anchorites:

In our very humid and salt laden air the leads of electronic components can be easily damaged by rust from long term storage. I have observed this in subminiature tube leads. A solution to the problem is a product made for boat owners. The product is a CRC 656 lubricant and protector that is used extensively to protect metal parts in boat motors. This lubricant lasts much longer that WD40 and is specially formulated so that it cannot damage even electrical wires. I have used it in my stored subs and the leads look like new. It can even be used on circuits that you want to protect from corrosion a long time. CRC products are available in any K-Mart store (sports section). I know that for many of you this is not a problem but for those living near the coast is a BA lifesaver.

Best 73s to all,
Guido E. Santacana KP4FAR
BA collector in the tropics
San Juan,Puerto Rico

------------------------------
Message-Id: <3.0.1.32.19980422104102.00e0767c@teal.csn.net>
Date: Wed, 22 Apr 1998 10:41:02 -0600
To: Old Tube Radios <boatanchors@theporch.com>
From: Jack Harper <jharper@bs2000.com>
Subject: Re: Geeez!  Don't kill yerself! (Bzzzzzt!)
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

At 09:43 4/22/98 -0600, you wrote:
>On Tue, 21 Apr 1998, Richard Loken VE6BSV wrote:
>
<snip>
>
>You may implicitly trust as three wire cord to save your life but I won't.
>---

I agree -- you can buy a neat little gizmo at your local Radio Shack for a couple of dollars that shows that a three-wire outlet is wired correctly or not. Several LED's tell you if one of the ground terminals is not grounded or the thing is totally incorrect etc.

Regards

Jack, W0YJ (Friend to all things Hammarlund)

---

Jack Harper Bank Systems 2000, Inc.
303-277-1892 Golden, Colorado USA

"21st Century Financial Applications"
Optical Cards for Bank, EBT, and Medical Applications
Visit our Web Page: http://www.bs2000.com/talos (Last Update: 970902)

---

From: k5pgw@linknet.net
Message-Id: <3.0.5.16.19980422170035.269735a0@popalex1.linknet.net>
Date: Wed, 22 Apr 1998 17:00:35
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Weller soldering devices
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Hi Ya'll: Do any of you know if Weller (soldering folks) has an email address? If they do and you know, please share it with me. Thanks in advance. John, K5PGW

---

From: Stevenn@ix.netcom.com
Date: Wed, 22 Apr 1998 12:28:37 -0500 (CDT)
To: Old Tube Radios <boatanchors@theporch.com>
Message-Id: <199804221225524111478@ix.netcom.com>
Subject: Navigator - who had one for sale at $80?
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii

Re Navigator

Sorry I blew out the information.

There was a W9 going to Dayton that had a presale and one of the items was a Navigator.

Please contact me.

Thanks

Steve K2PTS
Schaumburg, IL

---

Date: Wed, 22 Apr 1998 13:37:53 -0400
Message-Id: <199804221737.NAA15395@brill.shiva.com>
From: John Shriver <jas@shiva.com>
To: Old Tube Radios <boatanchors@theporch.com>
CC: boatanchors@theporch.com
Subject: Re: Weller soldering devices

Weller is part of the ever-growing Cooper Tools conglomerate.  They are at http://www.coopertools.com.  But, their web site is definitely still rather tentative and incomplete.  There is an Electronics catalog (in PDF format) on the catalogs page.

I just happened to call Cooper Tools (919-362-7510) yesterday to ask about getting a current catalog, and their catalog is out of stock, since they will be releasing a new edition in about a month. Apparently, that one will be sucessfully made available on the web as well.

(Result of my call: Cooper has unfortunately discontinued my favorite Crescent 622-5C short chain nose side-cutting pliers.  I hope my pair never breaks.)

---

Message-Id: <199804221756.KAA27284@shell.wco.com>
From: "Captain Larry Rau" <rau@wco.com>
To: Old Tube Radios <boatanchors@theporch.com>
Cc: "boatanchors" <boatanchors@theporch.com>
Subject: Re: Yellowed plastic  Relic from my past
Date: Wed, 22 Apr 1998 10:50:46 -0700
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit

word is that the fine plastic polishes from AES will remove the yellow from lens covers, meter lenses ETC... when mixed with lots of elbow grease...use the finest one.
73

---

From: "Paul Bernhard Sr." <w2tu@email.msn.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Grounded outlets.
Date: Wed, 22 Apr 1998 15:00:57 -0400
Message-ID: <026993701191648UPIMSSMTPUSR03@email.msn.com>

While it is not an answer to the two wire vs. three wire "grounded" outlet controversy there are several instances in the NEC Code that allow for

changing receptacles in an existing two wire installation to grounding
receptacles. See Art 210 & 250 for some of the allowable cases in point.
While the Code is only for the protection of life and equipment and does not
allow for expansion or future needs (This must be done by the parties
involved) it does realize that these regs are not to be economically applied
to existing installations.
Hope this explains some of those odd installations.
(The code still allows Knob and Tube in some cases!).
That is allows not recomends!

Paul W2TU

w2tu@msn.com

---

Message-Id: <3.0.5.32.19980422143903.007ccc30@pop.pipeline.com>
Date: Wed, 22 Apr 1998 14:39:03 +0000
To: Old Tube Radios <boatanchors@theporch.com>
From: "Lawrence R. Ware" <lrware@pipeline.com>
Subject: restoration issues?
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

In response to my National RCD restoration series, I received the
following today:

>I just want to let you know that I am thoroughly enjoying your account
>of the RCD restoration.
So far so good. :-)

>Also, I want to make a request of you and other
>restorers. PLEASE do not discard any original parts; bag or box them,
>identify them, and keep them with your restoration notes and keep it all
>with the set. Shorted or leaky capacitors, for example, can be rebuilt
>and reinstalled to take the set back as close as possible to original
>condition. Other parts can be used to identify an exact replacement. A
>few- too few- sets that have come into my posession have received this
>treatment and I am eternally grateful to the restorers who were
>thoughtful enough to save EVERYTHING.

Hummm, this raises a couple of interesting questions. My initial take
on this was that someone had more time than sense... After thinking
about for a few minutes, I decided perhaps he had a point.

In general I've followed the following guidelines when working on
my Nationals:

1) No new/extra holes for any reason.
2) Front panel must be and look original.
3) Rear panel should also.
4) View from top looking in should be original.
5) Under the chassis is wide open. IE: Modern parts, new wiring, hidden fuses, current limiters, etc. all OK.
6) 3-wire power cord with chassis grounded OK.
7) Rusty hardware has to go, I like brass replacements, just because it looks nice to me.

Now I'll be the first to admit that I don't do museum restorations,
I do working radios to use....
Anyone who has seen me in SWL mode running 8 different rack mounted
Nationals and a panadaptor knows this.... :-0

Is saving old wax caps, dog bone resistors, etc. important?
Should it be?
Does anyone but museum curators and a lone voice out in the Internet care?

thoughtfully,
-Larry

# Larry Ware
# Admirer, Collector, Restorer of National Radio Company
# receivers and other artifacts.
# Orlando, Florida
# lrware@pipeline.com

---

Message-ID: <353E4968.2A62D29D@swbell.net>
Date: Wed, 22 Apr 1998 14:47:53 -0500
From: Lenox Carruth <carruth@swbell.net>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
CC: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: restoration issues?
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Sounds like there are two different concepts at work here. We have run into a lot of the same discussion in the Confederate Air Force as some people believe that all old aircraft should be in museums as static displays and not flown at all.

As I see it, the argument is like this:

If the radio (aircraft, etc.) is one-of-a-kind or extremely rare, then it should not be altered from its original condition. If it does not operate, so what? At least future generations can look at it and see the original components and, perhaps, gain some appreciation for the way things were done in "the old days." This is, in fact, what the National Air and Space Museum does.

On the other hand, if the radio (aircraft, boat, car, etc.) is not particularly rare, there is no reason why appropriate restoration work should not be done to make it operational. Saving the original components is not a bad idea. However, if the artifact has already had irreversible modifications made, there is probably no good reason to save original components unless you know of someone who needs them or who is doing "museum" restoration. This is, more or less, what the Confederate Air Force does.

Since old radio transmissions cannot be received on old receivers, there is not an exact correlation between the need for operating radios and cars, aircraft, etc. Unfortunately, we can no longer hear spark gap transmitters. It is becoming more and more difficult to find Morse code when you want to demonstrate an old radio. So, museum examples should remain just that. Common sets that can be restored and used should be. Just don't booger up the last remaining, original Command Set!

This commentary is worth exactly what you paid for it.

--

Lenox

--------------------------------------------------------------------------------

Lenox Carruth, Jr.               carruth@swbell.net
Dallas, Texas
Collector of WW-II Communications Equipment and Memorabilia

Wanted:  TCS-14 Transmitter,  TBX,  BD-71,  Sextant
--------------------------------------------------------------------------------

------------------------------
To: Old Tube Radios <boatanchors@theporch.com>
From: "A. B. Bonds" <ab@vuse.vanderbilt.edu>
Subject: Re: restoration issues?
Message-Id: <1998Apr22.145249-0500@spike.vuse.vanderbilt.edu>
Date: 22 Apr 1998 14:52:45 -0500

MIME-Version: 1.0

In <3.0.5.32.19980422143903.007ccc30@pop.pipeline.com>, Lawrence R. Ware wrote:
>In response to my National RCD restoration series, I received the
>following today:
>
>>Also, I want to make a request of you and other
>>restorers.  PLEASE do not discard any original parts; bag or box them,
>>identify them, and keep them with your restoration notes and keep it all
>>with the set.  Shorted or leaky capacitors, for example, can be rebuilt
>>and reinstalled to take the set back as close as possible to original
>>condition.
>
>Hummm, this raises a couple of interesting questions. My initial take
>on this was that someone had more time than sense... After thinking
>about for a few minutes, I decided perhaps he had a point.
>
>Now I'll be the first to admit that I don't do museum restorations,
>I do working radios to use....

>Is saving old wax caps, dog bone resistors, etc. important?
>Should it be?
>Does anyone but museum curators and a lone voice out in the Internet care?
>

Your guidelines appear to be reasonable, i.e., above all Do No Harm. No holes, try to save the paint, etc.  I must agree with regard to under the chassis, most anything goes.  I have never understood the rationale of hiding a mylar inside a wax case.  I guess there are people out there who are really bored.  Fact is that most of the dogbone and (above all, much to my chagrin) ceramic cased resistors are lousy and should never be used.  I suppose that one could fit a modern 1/2 w carbon film inside a ceramic case, but sheesh, the work...  And what would you do with a comp resistor, or a Black Beauty?

Above comment inspired by finding (after having replaced about half of the ceramic 1/2 watters in my SX-28) that the rest of them are causing endless trouble.  In part, this arises from them getting loose (inside) and changing value from the heat and tugging involved in replacing other components on the same terminal.  It looks like I'm gonna end up changing them all out....

Bottom line:  So many orphans, so little time.  There are a lot of BAs out there worthy of resurrection.  There is a lot more to saving a BA than recapping a table radio.  If I rebuilt each and every component and put it back in the exact same place (for a "100%" resto), I'd be lucky to do one radio in two years instead of two months or so.

I also restore British cars, and am not ashamed of stainless hardware, teflon valve seals, a spin-on oil filter and Iskanderian cam followers in my 1930 Rolls-Royce. (No, it does not have racing stripes or fuzzy dice.) These artifacts were meant to be USED.

A. B. Bonds

---

Message-Id: <3.0.1.16.19980422153457.4f4f41ec@email.scasd.k12.pa.us>
Date: Wed, 22 Apr 1998 15:34:57 -0400
To: Old Tube Radios <boatanchors@theporch.com>
From: Doug Ripka <dlr11@scasd.k12.pa.us>
Subject: GR 650A bridge
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Barry Ornitz wrote:

>I am not aware of any amplifier/detector for the unit, but an AC power
>supply was available. You should use high impedance headphones to null
>the unit. (snip)

Hi Barry and the group,

There was an optional amplifier, the 650-P1 which combined a power supply an amplifier, and a 1 kc oscillator in a unit that fit where the four ignition cells went. I have only seen one that was loose from the 650, all the others were installed in 650's. I have a photocopy manual for a Heathkit impedance bridge, which was supposed to be an electrical copy of the 650, even down to using a GR hummer unit. The difference was supposed to be in the quality of the bridge elements.

73,

Doug

---

From: JONWEINER <JONWEINER@aol.com>
Message-ID: <69e03161.353e4c28@aol.com>
Date: Wed, 22 Apr 1998 15:59:34 EDT
To: Old Tube Radios <boatanchors@theporch.com>
Mime-Version: 1.0
Subject: FS: National HRO coil sets
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit

For sale, National coil sets for the HRO-5, types "A, B, C, & D". All are in excellent working condition, however, the metal logging scales have been removed, and replaced with linear logging scales (under plastic), The plastic is quite old and yellowed, but easily removed. Price: $50. ea., or $175 for all. Shipping is included.

Jon, K1VVC

---

Message-ID: <353E7C01.61FF@idirect.com>
Date: Wed, 22 Apr 1998 16:23:45 -0700
From: Jerry Proc <jproc@idirect.com>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
CC: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: power lines / chassis grounds
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Bill Hawkins wrote:
>
> We few who are electronic archaeologists work with equipment
> that comes from a time when power grounding was not the way
> you got electrical safety.

I often wondered about this. Wonder why it took nearly 60 years or so to develop 'code' for safety grounding of electrical applicances assuming we start at year 1900 for argument's sake. This is not, after all, rocket science. If there was any time when grounding was urgently required was the era when rubber was the predominant insulation around wire. The sight of an rubber insulated power line cord on any vintage equipment is enough to send shivers down my spine even if it looks new on the exterior.

Points to ponder:

Why do some double insulated applicances need a *polarized* 2 pin plug? These are such an annoyance that I usually trim down the wider prong in order to be able to plug in the device on the first try. At least with a 'U' ground, you can see which way to plug it in first time.

Why is my 5 year old toaster which is completly fabricated from metal, equipped with a two wire line cord yet it's CSA approved? The same goes for metal skined kettles which were made long after U grounding became part of electrical code. Today I see totally plastic kettles with U grounds cords! If there was ANY device that needs a safety ground, the metal toaster and kettle are the best examples.

Electrical safety can sure get strange at times :-)

--

Regards,
Jerry Proc VE3FAB
jproc@idirect.com
HMCS HAIDA Naval Museum, Toronto Ont.

---

Date: Wed, 22 Apr 1998 15:48:16 -0500 (CDT)
From: Bob Roehrig <broehrig@admin.aurora.edu>
To: Old Tube Radios <boatanchors@theporch.com>
cc: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: power lines / chassis grounds
Message-ID: <Pine.ULT.3.96.980422154527.6426A-100000@admin.aurora.edu>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Wed, 22 Apr 1998, Jerry Proc wrote:

>
> Why do some double insulated applicances need a *polarized* 2 pin plug?

Probably to insure that the switch is in the hot side.

> Why is my 5 year old toaster which is completly fabricated from metal,
> equipped with a two wire line cord yet it's CSA approved? The same goes
> for metal skined kettles which were made long after U grounding became
> part of electrical code. Today I see totally plastic kettles with U
> grounds cords! If there was ANY device that needs a safety ground, the
> metal toaster and kettle are the best examples.

I wonder: Are GFI's now required in kitchens? I don't think so, yet they
are in bathrooms. I bet we use more appliances in the kitchen near water
than in the bathroom.

"Nostalgia is a thing of the past"
E-mail broehrig@admin.aurora.edu           73 de Bob, K9EUI
CIS: Data / Telecom   Aurora University, Aurora, IL
630-844-4898  Fax 630-844-5530

---

Message-ID: <00a801bd6e38$21a30e40$75f9cdd0@fpfzqlga>
From: "Don Ehrlich" <ehrlich@olypen.com>
To: Old Tube Radios <boatanchors@theporch.com>

```
Subject: Need RAL-7  HELP
Date: Wed, 22 Apr 1998 14:46:34 -0700
MIME-Version: 1.0
Content-Type: multipart/alternative;
     boundary="----=_NextPart_000_00A5_01BD6DFD.71FE8120"

This is a multi-part message in MIME format.

------=_NextPart_000_00A5_01BD6DFD.71FE8120
Content-Type: text/plain;
     charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable

Lucky me.  I was just given an RAL-7 with power supply. Been in rough =
storage for decades but both units are clean and complete inside.  I am =
impatient to get this thing running so I can see if all of the raves I =
hear for this old gear are deserved.  I need words of wisdom and =
experience and documentation.

Mine is serial 1132 made by Andrea Radio Corp under contract NXsr-38089.

The House In Wren Wood ... Don and Judith Ehrlich

------=_NextPart_000_00A5_01BD6DFD.71FE8120
Content-Type: text/html;
     charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable

<!DOCTYPE HTML PUBLIC "-//W3C//DTD W3 HTML//EN">
<HTML>
<HEAD>

<META content=3Dtext/html;charset=3Diso-8859-1 =
http-equiv=3DContent-Type>
<META content=3D'"MSHTML 4.72.2106.6"' name=3DGENERATOR>
</HEAD>
<BODY bgColor=3D#ffffff>
<DIV><FONT color=3D#000000 size=3D2>Lucky me.&nbsp; I was just given an =
RAL-7 with=20
power supply. Been in rough storage for decades but both units are clean =
and=20
complete inside.&nbsp; I am impatient to get this thing running so I can =
see if=20
all of the raves I hear for this old gear are deserved.&nbsp; I need =
words of=20
wisdom and experience and documentation.</FONT></DIV>
<DIV><FONT color=3D#000000 size=3D2></FONT>&nbsp;</DIV>
<DIV><FONT size=3D2>Mine is serial 1132 made by Andrea Radio Corp under =
```

contract=20
NXsr-38089.</FONT></DIV>
<DIV><FONT size=3D2></FONT>&nbsp;</DIV>
<DIV><FONT color=3D#000000 size=3D2>The House In Wren Wood ... Don and =
Judith=20
Ehrlich</FONT></DIV></BODY></HTML>

------=_NextPart_000_00A5_01BD6DFD.71FE8120--

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Message-ID: <353E6C68.54CA@infonline.net>
Date: Wed, 22 Apr 1998 18:17:12 -0400
From: Charles Ring <charlesr@infonline.net>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Geeez!  Don't kill yerself! (Bzzzzzt!)
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Jack Harper wrote:

> At 09:43 4/22/98 -0600, you wrote:
> >On Tue, 21 Apr 1998, Richard Loken VE6BSV wrote:
> >
> <snip>
> >
> >You may implicitly trust as three wire cord to save your life but I won't.
> >---
>
> I agree -- you can buy a neat little gizmo at your local Radio Shack for a couple of dollars that shows that a three-wire outlet is wired correctly or not. Several LED's tell you if one of the ground terminals is not grounded or the thing is totally incorrect etc.
>
> Regards
>
> Jack, W0YJ (Friend to all things Hammarlund)
>

It may seem unlikely, but once I used one of those three-light testers and all three lights lit. Two green and one red. I got out the Tripplett 630 and found that the outlet, an outdoor 120V 3-wire one, was wired to 240 volts! This was at an appliance store with an on-staff electrician. The 240 volts had just damaged some remote broadcast gear (the reason I was there).

73 de W3NU

---

Date: Wed, 22 Apr 1998 15:36:54 -0700 (PDT)
From: "N. West" <ninaw@u.washington.edu>
To: Old Tube Radios <boatanchors@theporch.com>
cc: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Need manuals and info on General Radio 650-A Impedance meter
Message-ID: <Pine.A41.3.96a.980422152257.70236A-100000@dante20.u.washington.edu>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Barry,
Thanks for your reply and on behalf of Boatanchors, welcome back. Had some questions a few weeks back about touching up the finish on a General Radio US Navy Model LX and now the new GR 650-A. I am assuming that this is a shellac finish and a good wiping with methanol will hide the scratches. I haven't located any methanol, just ethanol cut with methanol. Any thoughts on touching up these GR wooden cabinets?

Fred Powell
c/o
ninaw@u.washington.edu

---

Date: Wed, 22 Apr 1998 15:56:03 -0700 (PDT)
From: "N. West" <ninaw@u.washington.edu>
To: Old Tube Radios <boatanchors@theporch.com>
cc: boatanchors@theporch.com
Subject: Puget Sound Antique Radio Association Information
Message-ID: <Pine.A41.3.96a.980422153718.70236B-100000@dante20.u.washington.edu>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

I am copying this to the boatanchors list in case others are interested.
Puget Sound Antique Radio Association (PSARA) is a dedicated to the preservation and restoration of antique radio and wireless apparatus. A permanent display of these items is maintained at the Shoreline Historical Museum open to the public 10AM to 4PM Tuesday through Saturday.
PSARA meets monthly on the third Sunday (second Sunday in December) at 12 noon at the museum, guests welcome. A swap meet in the museum parking lot precedes the meeting. The BIG swap meet is in August.
The Museum is located North of Seattle in Shoreline on North 175th, one block West of Aurora Ave (one mile West of I-5, exit 176).
Although the club is mainly interested in antique radios, there is definitely some boatanchors spoken here. Through the swap meets and newsletter I have procured the following: RAK-5, R-388, GR 650-A, HP 410B, and countless repair parts and advice.

Fred Powell

c/o
ninaw@u.washington.edu

> I saw your posting on the Boatanchors Mail List, mentioning
> the Antique Radio Assoc swap meet.  I would like to attend
> this myself, would you be so kind as to provide details?
>

---

Message-Id: <199804222343.TAA29604@piglet.INS.CWRU.Edu>
Date: Wed, 22 Apr 1998 19:43:22 -0400 (EDT)
From: gcr2@po.CWRU.Edu (George C. Rybicki)
To: Old Tube Radios <boatanchors@theporch.com>
Subject: HRO-50 Tuning strips FS/trade

Even rarer than coil sets are the tuning strips. I have some extras FS/trade.
Bands A,C,D As, Bs, Cs, Ds offer or trade for coil sets. Also have a
few extra B range coil sets to trade for E, F, G, H sets. 73 George

---

Message-Id: <199804222355.AAA27046@punt2.hw.ac.uk>
To: Old Tube Radios <boatanchors@theporch.com>
From: Bill Jarvis <B.H.Jarvis@hw.ac.uk>
Date: Thr, 23 Apr 1998 01:55:05 +2200
Subject: 1925 magnetron

There was a brief exchange a few weeks ago about the origin of the
magnetron. I've just found a reference dated April 1925 to one.

Apparently the tube had a split cylindrical anode. With an axial
magnetic field, increasing the voltage on one anode causes the electrons
to speed up and arrive at the OTHER anode, thus providing the negative
resistance needed to sustain oscillation.

I have a quantity of split-anod double-triodes made for Wurlitzer (for
frequency generation and divider purposes). I was wondering whether
these could be pressed into service at RF some way.

============   =====   =====   BILL  J.   =====   =====   ============
GM8APX, qthr                                  EDINBURGH, SCOTLAND, UK

Num lex id dixit? Vere, lex asinus est

Net-Tamer V 1.10  - Registered

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Message-Id: <v03102803b1643dd2a9f9@[134.53.65.12]>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Date: Wed, 22 Apr 1998 20:44:37 -0400
To: Old Tube Radios <boatanchors@theporch.com>
From: Jim Garland W8ZR <4CX250B@miavx1.acs.muohio.edu>
Subject: HX50 Tranformer Woes - How to Rewind?

Hi Gang,

My attempts to nurse the shorted transformer in my HX-50 back to life have failed, and I either need a new transformer, or I need to learn how to rewind the existing one. A few months ago I recall seeing a posting with many helpful hints about removing laminations, rewinding cores, etc.  If somebody saved it, I'd appreciate a forwarded copy.  What kind of varnish and insulating paper should I use, etc.? I've done this once or twice in the past with filament transformers, but never really perfected the technique.

Also, if anybody's got an HX-50 junker with a good xfmr, I'd certainly like to buy it.  Seems a shame to lose my transmitter because of the bad transformer. I'm puzzled as to why so many rigs seem to have bad transformers. It seems like transformers should be the most reliable part of the radio, so long they're not abused.

73

Jim Garland W8ZR

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End of BOATANCHORS Digest 2024
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